REMARKS

Presently, claims 1, 3, 6, 8, 10-13, 15, 25, 31, 32, 34, 36-37, and 41 are pending in the application. Claims 4, 9, 14, 29, 30, 33, 39, 43, and 44 are withdrawn from consideration without prejudice or disclaimer to the subject matter contained therein. Claims 2, 5, 7, 16-24, 26-28, 35, 38, 40, 42, 45-50 have been canceled. Independent claims 1, 10, 25, 31, and 41 have been amended. Support for the amendments to independent claim 1, 10, 25, 31, and 41 may be found, for example, on page 11, lines 1-5 and page 17, lines 1-9 of the specification and in original claim 5. Accordingly, no new matter has been added by the foregoing amendments.

Prior Art Rejection – 35 U.S.C 103(a)

The Examiner has rejected claims 1-3, 5, 7, 10-13, 31-32, 34, 35, 41, 45-50 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,529,555 to Tahara *et al.* ("Tahara") in view of U.S. Patent No. 6,351,474 to Robinette *et al.* ("Robinette"). The Examiner contends that Tahara in view of Robinette teaches all elements of these claims. For the reasons stated below, Applicant respectfully traverses this rejection.

Tahara discloses a system for seamlessly splicing two encoded video streams. Tahara addresses how to match field and frame patterns of a replacement video stream with those of another live video stream so the original stream can be replaced without discontinuity (column 7, lines 25-28). In the embodiment of Tahara cited by the Examiner, a target bit rate is calculated for a stream that is to be inserted. The target bit rate is a function of the difficulty data supplied by video encoders for all of the video streams in a transmission (column 12, lines 35-60). This is done "dynamically" (column 12, line 59). Thus, the target bit rate in Tahara does not include a profile that is pre-designated. Rather, a dynamic target is created picture by picture for compression on the fly. Therefore, Tahara does not disclose an analysis of a video stream and the pre-designation of a bit rate profile from that stream for use in compressing a stream to be inserted into that stream. Furthermore, the calculated target bit rates in Tahara do not

constitute a profile for a stream but instead are instantaneous target bit rates for all programs.

Robinette discloses a network distributed remultiplexer for video programs bearing transport streams. In, Robinette, "each program has a predetermined bit rate…" This means that to transmit content of any given video, a certain number of bits are necessary for transmission at any given time (to prevent under/over flow). This statement does not mean that a certain number of bits are allotted for the transmission of the video, but instead that the video is composed of a certain number of bits per time period. In other words, the system in Robinette does not disclose a time varying bit rate profile but rather a constant bit rate.

The Examiner relies on Tahara for the concept of "computing a rate profile associated with a stream", "compressing the digital media advertisement according to the computed rate profile" and "inserting the compressed digital media advertisement in the stream at an advertising opportunity." The Examiner states that Tahara "lacks the pre-designating as claimed." The Examiner relies on Robinett for the teaching of pre-designating, concluding that it would have been obvious to combine the teachings of Tahara and Robinett. Applicant respectfully traverses this rejection.

Independent claim 1 recites (with emphasis added):

> A method for inserting a digital media advertisement in a digital multiplexed stream, the method comprising:
>
> pre-designating a rate profile associated with a program stream, wherein the rate profile describes the available bits in respect to time and wherein the rate profile comprises a time varying profile from the start point to the end point of an adverting opportunity;
>
> compressing the digital media advertisement according to the pre-designated rate profile; and
>
> inserting the compressed digital media advertisement in the digital multiplexed stream at the advertising opportunity in the program stream.

Applicant respectfully submits that the Examiner has provided a non-sensical reasoning for the combination of Tahara and Robinett. There is not "a reason that would have prompted a person of ordinary skill in the relevant field to combine..." Tahara and Robinett. *KSR Int'l Co. v. Teleflex Inc. 127 S. Ct. 1727 (U.S. 2007)*. The Examiner has stated that the motivation to combine is "to prevent underflow and overflow conditions." However, Tahara already contemplates underflow and overflow conditions as described in column 27, lines 26-40. Since, Tahara already contemplates underflow and overflow conditions it is unclear why one skilled in the art would look beyond Tahara for an answer already provided therein. Therefore, the proposed combination does not make "common sense" *See KSR*.

Furthermore, Robinett teaches away from Tahara. As previously mentioned, Tahara teaches the dynamic calculation of target bit rates. Robinett teaches a static predetermined bit rate. The teaching of a static predetermined bit rate is directly opposed to the use of a dynamically calculated target bit rate. Therefore, Robinett teaches away from Tahara.

Additionally, the combination of Robinett with Tahara will change the primary mode of operation of Tahara. Robinette teaches that "[e]ach program has a predetermined bit rate…" (column 6, line 21). Since Tahara focuses on dynamically calculating target bit rates, if the bit rates are predetermined as suggested by Robinette, Tahara will no longer function to dynamically calculate target bit rates. Therefore the proposed combination will change the mode of operation of Tahara. As such, there are inherent problems with the proposed combination.

Additionally, the proposed combination does not teach all aspects of the claims. The proposed combination does not disclose "pre-designating a rate profile associated with a program stream, wherein the rate profile describes the available bits in respect to time and wherein the rate profile comprises a time varying profile from the start point to

12

the end point of an adverting opportunity." as recited in claim 1. Applicant contends that references neither alone nor in combination suggest a rate profile as described in claim 1.

Tahara only teaches "dynamically" calculating a "target bit rate" based on "difficulty data … indicating the quantity of bits required for coding a target picture." In other words, Tahara "dynamically" changes the bandwidth usage of an already multiplexed program steam to determine how to compress an advertisement in accordance with that profile based on the difficulty data. The target bit rate only describes the target bit rate at a specific point in time and is not a "time varying profile from the start point to the end point of an advertising opportunity." The profile that the Examiner contends Tahara teaches, if anything, describes target bit rates at a specific point in time, and is not a "time varying profile from the start point to the end point of an adverting opportunity."

Robinette does not describe a rate profile either. Instead, Robinette describes each program as simply having a static predetermined bit rate at all times. Although the Examiner would be incorrect in doing so, even if the Examiner believes that this static predetermined bit rate is a rate profile, that represents a constant bit rate, such a rate profile cannot be considered a "time varying profile," because Robinette's predetermined bit rate does not vary at all. It is simply a bit rate requirement and not a rate profile. Therefore the combination as suggested still fails to teach or suggest a time varying rate profile.

Furthermore, since a rate profile is not taught by the combination, the combination cannot then teach "compressing the digital media advertisement according to the pre-designated rate profile," as recited in claim 1. An entire advertisement cannot be compressed according to the target bit rates described by Tahara. Even if, as the Examiner argues, the collective target bit rates for a number of channels could be considered a rate profile, this rate profile is not used to compress a digital media advertisement as recited in claim 1. Instead, the target bit rates that the Examiner argues are a rate profile, at best, are the target bit rates at an instant of all channels calculated. Therefore, the target bit rates are not a profile for compressing an advertisement, but

instead are the target bit rate for all channels at an instant. Robinette, does not define a time varying rate profile, and therefore cannot teach compressing an advertisement according to that profile.

Independent claims 10, 31, and 41, as amended, recite "predetermining a first bit rate profile for a first advertising opportunity, wherein the first bit rate profile describes the available bandwidth over time and wherein the first bit rate profile comprises a time varying profile from the start of the first advertising opportunity to the end of the first advertising opportunity;" "pre-defining an advertisement bit rate profile for an advertising opportunity in a digital program stream, wherein the digital program stream forms part of the statistically multiplexed digital stream, wherein the advertisement bit rate profile describes the available bandwidth over time and wherein the bit rate profile comprises a time varying profile from the start of the advertising opportunity to the end of the advertising opportunity;" and "a statistical multiplex unit capable of determining an available bandwidth of an advertising opportunity in a digital video program stream based on a pre-identified bandwidth profile, wherein the bandwidth profile describes the available bandwidth over time and wherein the bandwidth profile comprises a time varying profile from the start of the advertising opportunity to the end of the advertising opportunity;" respectively. For the same reasons discussed above with respect to independent claim 1, the proposed combination of Tahara and Robinette does not teach or suggest all elements of claim 10, 31, and 41. Therefore claims 10, 31, and 41 are believed to be patentable over the proposed combination.

Claims 2-3, 5, 11-12, 32, 34, and 35 are allowable at least by their dependency on independent claims 1 and 31, respectively. Claims 45-50 have been canceled. Reconsideration and withdrawal of the Examiner's rejection of claims 1-3, 5, 7, 10-13, 31-32, 34, 35, 41, 45-50 are respectfully requested.

The Examiner has rejected Claims 8, 15 and 36 under 35 U.S.C. 103(a) as being unpatentable over Tahara, in view of Robinette, and in further view of U.S. Patent No. 6,208,688 to Seo *et al.* ("Seo"). Applicant respectfully traverses this rejection.

For the same reasons discussed above with respect to the Examiner's rejection of claims 1-3, 5, 7, 10-13, 31-32, 34, 35, 41, 45-50, the combination of Tahara and Robinette does not teach or suggest all of the elements of independent claims 1, 10, and 31. Applicant respectfully submits that Seo does not teach or suggest the elements missing from the combination. Accordingly, independent claims 1, 10, and 31 are believed to be allowable over the combination of Tahara and Seo. Dependent claims 8, 15, and 36 are allowable at least by their dependency on independent claims 1, 10, 31, respectively.

The Examiner has rejected claims 6, 25, and 37 under 35 U.S.C. 103(a) as being unpatentable over Tahara in view of Robinette and in further view of U.S. Patent No. 6,611,624 to Zhang et al. ("Zhang").

Independent claim 25 recites "an ad encoder/compressor capable of encoding and compressing a first advertisement and a second advertisement at a predetermined aggregate bit rate profile ... , wherein the first and second bit rate profiles describe the available bandwidth over time and wherein the first and second bit rate profiles comprise time varying profiles from the start of the first and second advertising opportunities to the end of the first and second advertising opportunities, respectively." The combination of Tahara, Robinette, and Zhang fails to teach or suggest all features of independent claims 1, 25, and 31 for the reasons discussed above in regard to claim 1. Therefore, independent claims 1, 25, and 31 are believed to be allowable over the combination of Tahara, Robinette, and Zhang. Dependent claims 6 and 36 are allowable at least by their dependency on independent claims 1 and 31, respectively. Reconsideration and withdrawal of the Examiner's rejection of claims 6, 25, and 37 is respectfully, requested.

The Examiner has taken Official Notice with respect to claim 12. Specifically, the Examiner contends that "it would have been obvious for the profile to supply the instantaneous sum of the first and second bit profile...in order to make the apparatus operate more efficiently by already knowing the sum of the bit rates instead of calculating them." (Office Action, page 4). However, Applicant disagrees that these statements are "facts outside of the record which are capable of instant and unquestionable

15

demonstration as being 'well-known' in the art," as required by M.P.E.P. §2144.03, which would support an Examiner's finding of Official Notice.

To the extent that the Examiner's taking of Official Notice may be applied to any of the pending claims, Applicant respectfully traverses the Examiner's taking of Official Notice, and respectfully requests that the Examiner support the taking of Official Notice by producing a relevant reference(s) that shows/teaches the above-identified assertions, and that the Examiner identify a specific teaching in such reference(s) to support a combination with the cited prior art.

Conclusion

In view of the foregoing remarks, Applicant respectfully submits that the Examiner's objection and rejections have been overcome, and that the application, including claims 1, 3, 6, 8, 10-13, 15, 25, 31, 32, 34, 36-37, and 41 is in condition for allowance. Reconsideration and withdrawal of the Examiner's objection and rejections and an early Notice of Allowance are respectfully requested.

Respectfully submitted,

Date: _____5/17/07_____   By: _____

Andrew W. Spicer
Registration No. 57,420
Technology, Patents & Licensing, Inc.
2003 South Easton Road, Suite 208
Doylestown, PA 18901
267-880-1720
Customer Number 27832